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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,232	01/09/2001	Khiem Le	59864.00633	6982

32294 7590 02/07/2007  
SQUIRE, SANDERS & DEMPSEY L.L.P.  
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TYSONS CORNER, VA 22182

EXAMINER
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CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
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2162

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/756,232	LE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jean M. Corrielus	2162	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1/25/07.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19,21-40 and 42-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19,21-40 and 42-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to the amendment filed on July 25, 2006, in which claims 1-19, 21-40 and 42-52 are presented for examination.

#### ***Remark***

2. Please vacate the last rejection in light of the following rejection.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-19, 21-40 and 42-50 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

#### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-19 and 21-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, as directed to an abstract idea.

Claims 1-19 and 21-31 define non-statutory processes because they merely manipulate an abstract idea. More specifically, claims 1, and 19 recite a method comprising communicating information; comparing a current item list, determining a type and using the type of classification to communicating information". Such limitations of the claims are just an abstract idea without product a concrete result and they are not embedded in the computer system to form the basis of 101 statutory subject matter. Using the determining type of classification to control the communicating the information is just an intend used on performing a task. Having the intention to control the communication information is not a tangible, concrete, and useful result generated

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based on the determining type of classification. Second, such limitations as claimed can be done in a piece of paper without requiring a computer system to perform. Therefore, claims 1-19 and 21-31 are directed to an abstract idea that is not tied to a technological art, environment or machine which would produce a tangible, concrete and useful result to form the basis of statutory subject matter under 35 U.S.C. 101.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-3, 14, 15, 19, 21, 22, 32-34, 40, 42-43 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes US Patent no. 5,864,860 and Silver et al., (hereinafter "Silver") US Patent no. 5,481,712.

As to claims 1, 19, 32, 40 and 51-52, Holmes discloses a system and method for compressing a data sequence having a plurality of records, wherein each record has a plurality of fields with

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each field beings classified to contain data items. In particular, Holmes discloses the claimed “communicating information” (compressing a data sequence; col.3, lines 2-3); “comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items” (col.3, lines 5-7). Holmes does not explicitly determine the type of classification based on the comparing items and using the classification type to control the communication. However, Holmes disclose a system that indicated which data item matches the data item in the reference list and replace the current data item by a token indicating the match (col.3, lines 5-15). On the other hand, Silver discloses a list of items that is a mutable ordered collection of elements, wherein the list of items can have elements added or removed from the front or back; the list has a notion of current item and insertion and removal can be performed from there. Such lists disclosed by Silver can be traversed in forward and backward order. Similarly to the description provided by the specification page 21, lines 1-9, which discloses the insertion, removal, change of content and reorder Items on the list, by comparing the current item list with the reference item list. Silver, on the other hand, discloses the claimed “determining a type of classification based on said comparing of the items of the list “ (col.50, lines 31-44; col.61, lines 10-14); and “using the determined type of classification to control the communicating the information” (col.50, lines 31-44; col.61, lines 10-14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of the cited references by incorporating the use of determining classification type and control, the communicating the information based on the determined type in the system of Holmes in the same conventional manner as disclosed by Silver. One having ordinary skill in

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the art would have found it motivated to use such a modification for the purpose of ensuring the validity of the data item; thereby enabling a reduction in the amount of data to be transferred.

As to claims 2, 21, 33 and 42, Holmes discloses the claimed “wherein the comparing determines a difference between said current item list and said reference item list” (col.4, lines 37-50; the unmatched data items).

As to claims 3, 22, 34 and 43, Holmes discloses the claimed “sending information regarding said difference from the first entity to a second entity” (col.4, lines 40-44 difference between the unmatched items).

As to claim 14, 15, 30, 31, d 15, Holmes discloses “sending information regarding a difference between an item in said current list and a corresponding item in said reference item list” (transmitting the unmatched item based on the comparison between the item list and the reference item list; see col.); and “whether the item is in the reference item list” (col.).

9. Claims 4-13, 16-18, and 23-29, 34-39, 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes US Patent no. 5,864,860 and Silver et al., (hereinafter “Silver”) US Patent no. 5,481,712 and further in view of Svanbro et al (hereinafter Svanbro”) US Patent no. 6,535,925.

As to claim 4 and 25, Holmes and Silver disclose substantially the invention as claimed.

However, Holmes does not explicitly disclose the use of encoding the information regarding said

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difference prior to sending said information from said first entity to said second entity. On the other hand, Svanbro discloses the claimed feature “encoding the information regarding said difference prior to sending said information from said first entity to said second entity”(col.5, line 15-21, compression technique). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes’ fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred.

As to claims 5 and 26, Holmes and Svanbro disclose substantially the invention as claimed. However, Holmes does not explicitly disclose the claimed wherein encoding the information comprises encoding information regarding a position of a newly added item to said reference item list. On the other hand, Svanbro discloses the claimed feature “wherein encoding the information comprises encoding information regarding a position of a newly added item to said reference item list” (col.5, line 15-col.8); and “encoding information regarding which item in said reference item list is not in said current item list” (col.5, line 15-col.8, line 63). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes’ fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize

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such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred.

As to claims 6 and 27, Holmes and Svanbro disclose substantially the invention as claimed.

However, Holmes does not explicitly disclose the claimed wherein encoding the information comprises encoding information regarding which item in said reference item list is not in said current item list. On the other hand, Svanbro discloses the claimed feature “wherein encoding the information comprises encoding information regarding which item in said reference item list is not in said current item list”(col.5, line 15-col.8, line 63). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes’ fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination because that would provide Holmes’ system the enhanced capability of efficiently compressing a header of a real-time communication packet.

As to claims 7-11 and 28, Holmes and Svanbro disclose substantially the invention as claimed.

However, Holmes does not explicitly disclose the claimed wherein encoding the information comprises encoding information regarding content of at least one item in said reference item list. On the other hand, Svanbro discloses the claimed feature “wherein encoding the information comprises encoding information regarding content of at least one item in said reference item list”(col.5, line 15-21, compression technique). Therefore, it would have been obvious to one



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having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes's fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred

As to claim 29, Holmes and Svanbro disclose substantially the invention as claimed. However, Holmes does not explicitly disclose the claimed wherein said information further comprises a type of encoding. On the other hand, Svanbro discloses the claimed feature "wherein said information further comprises a type of encoding" (col.5, lines 15-col.6, line 65). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes's fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred.

10. Claims 1, 2, 14, 15, 19, 21, 27, 28, 33-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes US Patent no. 5,864,860 and Barnett et al., (hereinafter "Barnett") US Patent no. 6,321,208.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

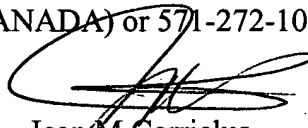
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jean M Corrielus  
Primary Examiner  
Art Unit 2162

February 1, 2007